## (19) World Intellectual Property Organization International Bureau



## I DERN ENITER IN DELIN DIEN EDIN EDIN EDIN EDIN EDIN EDIN ET EN ENITE IN ENITE ENITE IN ENITE IN ENITE IN DER

(43) International Publication Date 7 April 2005 (07.04.2005)

PCT

(10) International Publication Number WO 2005/031032 A2

(51) International Patent Classification<sup>7</sup>:

C23C 16/455

(21) International Application Number:

PCT/GB2004/004121

(22) International Filing Date:

24 September 2004 (24.09.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 0322602.4

26 September 2003 (26.09.2003) GB

- (71) Applicant (for all designated States except US): THE BOC GROUP PLC [GB/GB]; Chertsey Road, Windlesham, Surrey GU20 6HJ (GB).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): CZERNIAK, Michael [GB/GB]; BOC Edwards, Manor Royal, Crawley, West Sussex RH10 2LW (GB).
- (74) Agent: BOOTH, Andrew, Steven; The Boc Group Plc, Chertsey Road, Windlesham, Surrey GU20 6HJ (GB).

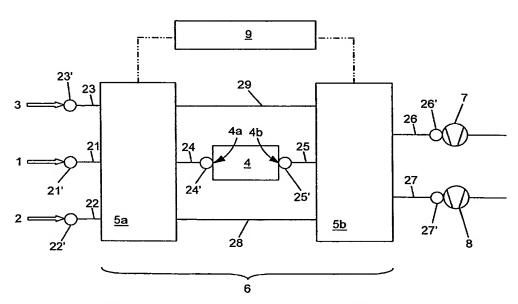
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## **Published:**

 without international search report and to be republished upon receipt of that report

[Continued on next page]

(54) Title: APPARATUS FOR CONVEYING GASES TO AND FROM A CHAMBER



(57) Abstract: Apparatus comprising: a chamber having a chamber inlet and a chamber outlet; a first inlet for receiving a first gas stream; a second inlet for receiving a second gas stream; a first outlet for outputting the first gas stream to a first vacuum pump; a second outlet for outputting the second gas stream to a second vacuum pump; a conduit network for connecting the first inlet to the first outlet and for connecting the second inlet to the second outlet such that, for each gas stream, first and second flow paths are defined between its respective inlet and outlet, the first flow path passing through the chamber inlet and the chamber outlet, and the second flow path by-passing the chamber; and means for routing the gas streams through the network such that when one gas stream flows along its first flow path, the other gas stream flows along its second flow path.

## WO 2005/031032 A2

. ( COLUMN DINICULA COLUMN COLUMN

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.